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Abstract

An Electro-modulating Device

This relates to an electro-modulating device (10) for modulating light from a light source, as part of an optoelectronic communication network. The electro-modulating device (10) has a modulating medium (16) for modulating light passing therethrough by varying an electric field applied across the modulating medium (16), an optical input-output surface (21), a light reflector (28), and electrodes (15,17) for applying the varying electric field across the modulating medium (16). The input-output surface (21), the medium (16) and the reflector (28) are arranged so that light enters the medium (16) through the input-output surface (21), travels through the medium (16) towards the reflector (28), is reflected by the reflector (28) to travel back through the medium (16) towards the input-output surface (21), and exits the medium (16) 20 through the input-output surface (21). The electric field is transverse to light traversing the medium (16) between the input-out surface and the reflector (28), to make it easier to couple an optic fibre to the input-output surface (21) of the modulating medium (16).

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Figure 1